

**Amendments to the Specification:**

Please replace the paragraph beginning at page 1, line 4, with the following rewritten paragraph:

-- This application is a divisional application of U.S. Application No. 09/339,998, filed June 25, 1999, now U.S. Patent No. 6,410,826, issued June 25, 2002, which is based on, and claims the benefit of U.S. Provisional Application No. 60/090,649, filed June 25, 1998, which is herein incorporated by reference.--

Please replace the paragraph beginning at page 2, line 16, with the following rewritten paragraph:

-- Figure 2 shows characterization of the lignification pattern of wild-type and *agl8* ("ful") fruits. Transverse sections of wild-type and *agl8* fruits (stage 17) were stained with toluidine blue and viewed with Nomarski optics. Bright field (photos on left A,C) and dark field photographs (photos on right B,D) are shown of the same wild type (top photos A,B) and *agl8* (bottom photos C,D) sections. The staining and autofluorescence patterns of lignified cells differ between wild-type (top photos A,B) and *agl8* (bottom photos C,D) sections. Whereas wild-type sections show patches of lignified cells adjacent to the valve margin, and lignification of the fifth valve cell layer, *agl8* sections show lignification of additional valve cell layers corresponding to mesophyll layers. Lignification of the fifth valve cell layer and of the vascular bundles in the replum appears unaffected in *agl8* fruits, although the vascular bundles appear more disorganized.--

Please cancel the paragraph on page 11, lines 12-15, describing Figure 8.

Please cancel the paragraph on page 11, lines 16-21, and replace the paragraph with the following:

--Figure 8 shows the nucleotide sequence (SEQ ID NO:24) and amino acid (SEQ ID NO:25) of *Arabidopsis* R-like basic helix-loop-helix transcription factor (R-like bHLH). The nucleotide sequence SEQ ID NO:24 includes sufficient promoter sequence to give valve margin specific expression.--

Also, please cancel the paragraph on page 42, lines 9-20 and replace the paragraph with the following:

--The *Arabidopsis* *AGL1* and *AGL5* genes encode MADS box proteins with 85% identity at the amino acid level (see Tables 1 and 2 ~~and Figure 8~~). The *AGL1* and *AGL5* RNA expression patterns also are strikingly similar. In particular, both RNAs are specifically expressed in flowers, where they accumulate in developing carpels. In particular, strong expression of these genes is observed in the outer replum along the valve/replum boundary (Ma et al., *supra*, 1991; Savidge et al., The Plant Cell 7:721-723 (1995); Flanagan et al., The Plant Journal 10:343-353 (1996), each of which is incorporated herein by reference).--